

Work Order ID 133112

Tuesday, May 26, 2015 12:44:38 PM

133112

Page 1

Item ID: D3260-1

Revision ID:

Item Name: Spring

Start Date: 5/26/15 Start Qty: 10.00

Required Date: 5/26/15 Req'd Qty: 10.00

Reference:

Accept

N900040100

Setup Start ***NS1***

Stop ***NS2***

Cust Item ID:

Customer:

Approvals: Process Plan: MLJ Date: MAY 26 2015 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3260	Rev A								

100

100

Purchasing

Purchasing

PURCHASING

Memo

Issue P/O: 28630 Make as per Dwg D3260 Possible Supplier:
Victory Spring Material release note is required

0.00

0.00

CL MAY 29 2015 20

110

110

Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

Ensure Material Release Note is attached

0.00

0.00

20X 805-06-10

120

120

QC

Quality Control

QC6- Inspect dimensions to drawing

Memo

0.00

0.00

(20)

DAS
38
9-89
JUN 10 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 133112

Tuesday, May 26, 2015 12:44:38 PM

133112

Page 2

Item ID: D3260-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Spring

Stop ***NS2***

Start Date: 5/26/15

Start Qty: 10.00

10

Cust Item ID:

Required Date: 5/26/15

Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: 51031

0.00

130

Packaging

Memo

0.00

Packaging

20

27

JUN 11 2015

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.02

Quality Control

MLJ

JUN 11 2015

MLJ JUN 11 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐																								
Misidentified ☐	Past Due ☐																								
		OTHER : _____																							

Picklist Print

Tuesday, May 26, 2015 12:44:37 PM

Page 1

Work Order ID: 133112

133112

Parent Item: D3260-1

D3260-1

Parent Item Name: Spring

Start Date: 5/26/15

Required Date: 5/26/15

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP A04.03.29New issueKJ/RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3260-1P

Purchased

No

100

Each

0.0000

1

~~10~~ 20 ✓

D3260-1P

20 x 8P 15-06-10

Spring

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

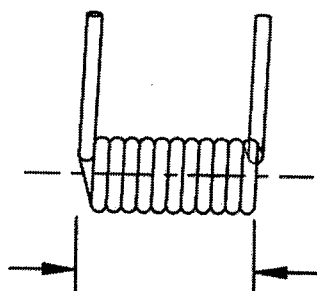
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			



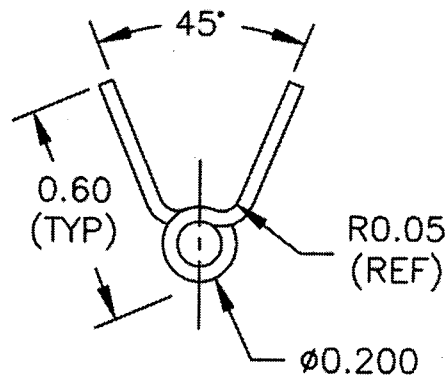
DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3260	REV. A SHEET 1 OF 1
DATE 04.02.27		TITLE SPRING	SCALE 2:1
A	04.02.27	NEW ISSUE	

RELEASED
04.04.07 *[Signature]*

SPECIFICATION CONTROL DRAWING



Ø0.040
12 COIL
(REF 0.480)



D3260-1 SPRING

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO A
WORK ORDER
WITH NOTICE
NO. 133118-465
1505-26

D3260-1 NOTES:

- 1) MATERIAL: AISI 302 SS SPRING WIRE Ø0.040 PER ASTM A313
(MIN TENSILE STRENGTH = 250 ksi)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28630**

Purchase Order Date 6/12/2015

PO Print Date 5/29/2015

Page Number 1 of 2

Order From :

VC-VIC002

Ship To : DART AEROSPACE LTD

VICTORY SPRING LTD.
#2 6104 - 82 AVE.
EDMONTON, AB T6B 0E7
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

866 230 5312

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						
1	D3260-1P	Spring	6/12/2015		20.00	\$9.25	\$185.00
			Yes		Each		
			6/12/2015				
	AS PER DWG.D3260 REV.A B133112						
Line Total:							\$185.00
2	71401-45	PROCUREMENT QUALITY CLAUSES	6/12/2015		1.00	\$0.00	\$0.00
			No				
			6/12/2015				
	Procurement Quality Clauses						
	A005 RIGHT OF ENTRY						
	A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER,						
	(DOCUMENTATION SENT TO DART AEROSPACE)						
	A016 PERSONNEL QUALIFICATION						
	A026 CERTIFICATION OF MATERIAL CONFORMANCE						
	A040 NOTIFICATION OF QUALITY ESCAPE						
	A042 DART NOTIFICATION BY SUPPLIER						
	A043 RETENTION OF QUALITY DOCUMENTS						

Note:

5/29/2015



convenient. consistent. correct.

PACKING SLIP

32764

#2, 6104 - 82 Ave
Edmonton, AB T6B 0E7
t + 780 442 4020
f + 780 466 8000

BILL TO:

Dart Aerospace Ltd
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7

SHIP TO:

DATE		ORDER No.		SHIP VIA	
4-Jun-15		PO28630		FedEx Overnight Collect	
QUANTITY	DESCRIPTION			UNIT	AMOUNT
20	D3260-1P Torsion Spring				
GST #		TERMS	SUBTOTAL	FREIGHT	GST
854454527		NET 30 DAYS			

SPS-06-15

MATERIAL CERTIFICATION

REPORT FOR: Dart Aerospace Ltd.	DATE: 6/4/2015																						
PART/DRAWING #: D3260-1P	PO # PO28630																						
SPRING DESCRIPTION: Torsion Spring	QUANTITY: 20																						
MATERIAL GRADE: T302 Stainless Steel Wire Spring ASTM-313-03																							
PROPERTIES: <table> <thead> <tr> <th><u>Chemical</u></th> <th><u>Physical</u></th> </tr> </thead> <tbody> <tr> <td>Carbon: (C) 0.076</td> <td>Size: 0.041"</td> </tr> <tr> <td>Chromium: (Cr) 18.242</td> <td></td> </tr> <tr> <td>Copper: (Cu) 0.259</td> <td>Tensile: 293,000</td> </tr> <tr> <td>Manganese: (Mn) 1.237</td> <td></td> </tr> <tr> <td>Molybdenum: (Mo) 0.149</td> <td></td> </tr> <tr> <td>Nickel: (Ni) 8.039</td> <td></td> </tr> <tr> <td>Nitrogen: (N) 0.045</td> <td>Heat # SO5114</td> </tr> <tr> <td>Phosphorus: (P) 0.029</td> <td></td> </tr> <tr> <td>Silicon: (Si) 0.472</td> <td></td> </tr> <tr> <td>Sulphur: (S) 0.0037</td> <td></td> </tr> </tbody> </table> Mill Source: DSR Origin Country: Korea		<u>Chemical</u>	<u>Physical</u>	Carbon: (C) 0.076	Size: 0.041"	Chromium: (Cr) 18.242		Copper: (Cu) 0.259	Tensile: 293,000	Manganese: (Mn) 1.237		Molybdenum: (Mo) 0.149		Nickel: (Ni) 8.039		Nitrogen: (N) 0.045	Heat # SO5114	Phosphorus: (P) 0.029		Silicon: (Si) 0.472		Sulphur: (S) 0.0037	
<u>Chemical</u>	<u>Physical</u>																						
Carbon: (C) 0.076	Size: 0.041"																						
Chromium: (Cr) 18.242																							
Copper: (Cu) 0.259	Tensile: 293,000																						
Manganese: (Mn) 1.237																							
Molybdenum: (Mo) 0.149																							
Nickel: (Ni) 8.039																							
Nitrogen: (N) 0.045	Heat # SO5114																						
Phosphorus: (P) 0.029																							
Silicon: (Si) 0.472																							
Sulphur: (S) 0.0037																							

Certified by: Jeremy Burrowes

Victory Spring Ltd. certifies this to be a true & accurate copy of the original contained in the company records.